Appl. No. 10/806,543 Amendment dated July 28, 2005 Reply to Official Action of April 28, 2005

In the Claims:

Please amend the claims as follows:

1. (Currently amended) A detector comprising:

at least a first nanostructured surface having a plurality of nanostructures nanostructured projections disposed thereon, the projections having tips;

at least a first droplet of liquid;

at least a first-reagent pixel on the surface, between a plurality of the projections; and means for moving a liquid across tips of the nanostructured projections without contacting the reagent pixel; and

means for moving said at least the a first droplet of liquid toward across said at least a first nanostructured surface in a way such that the liquid it contacts said at least a first reagent pixel.

- 2. (Currently amended) The detector of claim 1 wherein said means for moving comprises said plurality of nanostructures, wherein a the density of the nanostructured projections nanostructures in said plurality of nanostructures is varied in a way such that said at least a first droplet of liquid moves across tips of the nanostructured projections toward an the area on said at least a first nanostructured surface having a the highest density of tips of said nanostructured projections nanostructures.
- 3. (Currently amended) The detector of claim 1 wherein said means for moving a liquid across the nanostructured projections includes comprises a plurality of electrodes disposed on said at least a first nanostructured surface in a way such that, upon sequentially applying a

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voltage to at least one of the electrodes an electrode in said plurality of electrodes, a liquid

droplet moves in a desired direction.

4. (Currently amended) The detector of claim 1 wherein said at least a first droplet

is a droplet of liquid includes a reagent.

5. (Currently amended) The detector of claim 1 wherein said at least a first droplet

liquid is adapted to absorb particles disposed on the tips of said plurality of

projectionsnanostructures, said nanostructures disposed on said at least a first nanostructured

surface.

6. (Currently amended) The detector of claim 5 wherein said liquid at least a first

droplet is further adapted to transport said particles to the a desired destination such as a desired

reagent pixel in an array of pixels on said at least a first nanostructured surface.

7-17 (Cancelled)

18. (New) The detector of claim 1 in which the means for moving a liquid

toward the surface includes a plurality of electrodes disposed on the surface in a way such that,

upon applying a voltage to an electrode at a position on the surface, a liquid moves toward the

position on the surface.

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- 19. (New) The detector of claim 1 in which the means for moving a liquid toward the surface includes a heat source for heating the liquid to reduce surface tension of the liquid.
- 20. (New) The detector of claim 1 in which the means for moving a liquid toward the surface includes a source of acoustic energy.
- 21. (New) The detector of claim 1 in which the means for moving a liquid toward the surface includes a source of electromagnetic energy.
- 22. (New) The detector of claim 1 in which the means for moving a liquid toward the surface includes inducing a chemical change at tips of projections.
- 23. (New) The detector of claim 1 in which the liquid is in the form of at least one droplet.
 - 24. (New) The detector of claim 1, in which tips include microposts.
 - 25. (New) The detector of claim 1, in which tips include nanoposts.
 - 26. (New) The detector of claim 1, in which tips include a microline.

- 27. (New) The detector of claim 1, in which the reagent pixel is reactive with a chemical compound.
- 28. (New) The detector of claim 1, in which the reagent pixel is reactive with a biological agent.
- 29. (New) The detector of claim 1, in which the reagent pixel is reactive with a ribonucleic acid.
- 30. (New) The detector of claim 1, in which the reagent pixel is reactive with an antibody.
- 31. (New) The detector of claim 1, in which the reagent pixel is reactive with an antigen.